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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,702	10/16/2003	Hyun-kwon Chung	1793.1046	6760

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EXAMINER	
THOMAS, JASON M	

ART UNIT	PAPER NUMBER
4126	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/685,702	CHUNG ET AL.	
	Examiner	Art Unit	
	Jason Thomas	4126	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *See Continuation Sheet*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :1/20/2004, 6/17/2004, 9/13/2006.

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. Claims 1-12 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-18 of copending Application No. 10/685,701. Although the conflicting claims are not identical, they are not patentably distinct from each other because they claimed the same subject matter (i.e. a display system comprising an AV playback engine, an enhanced audio and/or video engine, a markup document used to play the audio and/or video data in an interactive mode, the markup document includes device-aspect-ratio information, and

the device-aspect-ratio information is referenced from the target display to display the markup document after being transformed into a markup picture).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Rainville et al. (U.S. Pre Grant Pub. 2002/0069411 A1).

Regarding claim 1, Rainville discloses a system which uses an apparatus to process audio and/or video (AV) data in an interactive mode using a markup document, comprising: an AV playback engine which decodes the AV data to output an AV picture (see [figure 6], [0033], [0034] it is well known in the art that MPEG audio and video requires decoding before it can be output); and an enhanced audio and/or video (ENAV) engine which interprets the markup document to obtain a source markup picture, transforms the source markup picture into a markup picture, combines the markup picture and the AV picture, and outputs an interactive picture including the markup picture and the AV picture (see [0036]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 2-6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rainville as applied to claim 1 above, and further in view of Nielsen (U.S. Patent No. 5,897,644).

Regarding claims 2 – 6 and 8, Rainville teaches all of the limitations of claim 1 including reading and processing information from the markup language for display (see [0043-0055]); parsing information using tags (see [0043]); transforming the markup picture according to information in the markup

Rainville does not teach wherein the device-aspect-ratio markup data is used in this apparatus, compared with information on an aspect ratio of a screen of a target display device, or displayed according to a design of a markup document maker.

Nielsen teaches reading and using the aspect ratio contained in the markup data to recreate the original presentation (see [column 3 lines 29-50]). Nielsen further teaches obtaining the aspect ratio of the target display device (see [column 7 lines 50-53]) and using this entire process to transform the markup document to fit within limitations of the target display device as well as futher adjusting it to display correctly (see [column 7 line 67 through column 8 line 19]).

At the time the invention was made it would have been obvious, to one of ordinary skill in the art, to have an apparatus, as taught in Rainville, which is capable of using the aspect ratio contained in the markup document and retrieved from the target display device, as taught in Nielsen, because there are so many display devices of different sizes it is important to be able to adjust a presentation for display at the proper aspect ratio according to the design of the document maker thus maintain the best image quality (see [column 3 lines 29-32]).

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rainville as applied to claim 1 above, and further in view of Nielsen and Yamauchi et al. (U.S. Patent No. 5,907,659).

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rainville as applied to claim 1 above, and further in view of Nielsen and Yamauchi et al. (U.S. Patent No. 5,907,659).

Rainville teaches all of the limitations of claim 1, including wherein markup picture is transformed by a ENAV engine (see [figure 6] and [0035-0036]).

Rainville does not teach wherein an aspect ratio of 4:3 or 16:9 is retrieved from the markup document for this transformation.

Nielsen teaches using the aspect ratio that is maintained in the markup document but not an aspect ratio of 4:3 or 16:9 (see [column 3 lines 38-50]).

Yamauchi teaches transforming image content into an aspect ratio of 4:3 or 16:9 (see [column 2 lines 19-49]).

At the time the invention was made it would have been obvious, to one of ordinary skill in the art, to use an apparatus, as taught in Rainville, to transform the source markup picture, as taught in Nielsen, to an aspect ratio of 4:3 or 16:9, as taught in Yamauchi, because aspect ratios of 4:3 and 16:9 are common formats for visual media (see Yamauchi [column 2 lines 9-16]).

5. Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rainville in view of Nielsen.

Regarding claim 9, Rainville discloses a controller and a markup transformer used to process a markup document in an interactive mode (see [figure 6]).

Nielsen teaches using the device-aspect ratio corresponding to the markup document and the aspect ratio of a target display device intended to display the markup document (see column 3 lines 38-50] and [column 7 lines 50-65]).

At the time the invention was made it would have been obvious, to one of ordinary skill in the art, to use an apparatus, as taught in Rainville, to obtain the device-aspect-ratio from a markup document or target display device, as taught in Nielsen, because there are so many display devices of different sizes it is important to be able to adjust a presentation for display at the proper aspect ratio to maintain the best image quality (see [column 3 lines 29-32]).

Regarding claim 10, Rainville discloses all of the limitations of claim 9 including wherein a controller embeds the video picture in the markup picture according to embedding information of the markup document (see [figure 6] and [0043-0055]).

Regarding claim 11, Rainville discloses all of the limitations of claim 9.

Rainville does not teach wherein the device-aspect-ratio information is included in the markup document.

Nielsen teaches wherein the device-aspect-ratio information is included in the markup document (see [column 3 lines 40-44]).

See motivation of claim 9.

Regarding claim 12, Rainville teaches all of the limitations of claim 9 including resizing the markup picture to substantially display the markup document to fit on the target display (see [0035-0036]).

Rainville does not teach wherein the display device outputting the markup document as is.

Nielsen discloses wherein the computer (markup transformer) scales the markup picture according to the device-aspect-ratio information in response to information on an aspect ratio of a destination device displaying the markup document being different from the device-aspect-ratio information and outputs markup picture as is in response to the information on the aspect ratio of the destination device corresponding to the device-aspect-ratio information (see [column 7 lines 50-65] for accessing information from the display device containing the image; see also [column 10 lines 59-65] for scaling or displaying as is; the image is not changed).

At the time the invention was made it would have been obvious, to one of ordinary skill in the art, to have an apparatus, as taught in Rainville, which is capable of using the aspect ratio contained in the markup document and retrieved from the target display device to determine when it is appropriate to display as is, as taught in Nielsen, because if the display is of adequate size it would be of no effect to transform the image to fit on the display.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Thomas whose telephone number is (571) 270-5080. The examiner can normally be reached on Mon. - Thurs., 8:00a.m. - 5:00p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dennis Chow can be reached on (571) 272-7767. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

J. Thomas

Lun-Yi Lao
Primary Examiner